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COMPARATIVELY ANALYSIS OF PREVALENCE OF FILARIASIS IN OSMANABAD TAHSIL, (DISTRICT OSMANABAD) MAHARASHTRA,INDIA

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ABSTRACT :

The objective of this study was to access the filariasis and hydrocoel patients in osmanabad tahsil in osmanabad district, Maharashtra, India.

KEYWORDS : *Filariasis, Hydrocoel, Osmanabad, Tahsil, sample collection,*

INTRODUCTION

Filariasis is a major health problem in India after malaria. Filariasis leads to chronic manifestation, causing considerable economic loss & severe physical disabilities to the affected individuals. In 1974—1975,wuchereria bancrofti, infection was point out among aborigines, inhabiting Andaman & Nicobar Islands. Ochlerotatus nives group of mosquitoes were incriminated as the Vectors. From the twenty states indigenous filariasis cases are reported. Forty percent of bancroftian filariasis in India are found of global scenario.

In the lymphatic system of man the parasite are usually found. The immune system disrupt when adult worm lodge in lymphatic system of human. An average of 6-8 years, the worms can live in lymphatic system. Adult worm produces millions of microfilarae which circulate in blood. The microfilaria carriers are usually without any recognised systems. The persons with advances disease even turnout to be negative for filaria.

The time in between the introduction of infective larvae & the first appearance of detectable microfilarae is known 'pre-patent' period. It usually varies varies from 1 to 11/2 years.

Though the disease is not fatal, it is usually acquired starting in early childhood & can debilitating leading to disability causing pain, unfold skin, misery & impairment of health.

The parasitic cycle in mosquito begins when the microfilarae are picked up by vector mosquito during their feeding on the infected person. The microfilaria in mosquito develops into three stages & under optimum conditions of humidity & temperature. About 10-14 days is the duration of the cycle in mosquito. When the infective mosquito feeds on other human host, the infective larvae are deposited at the site of mosquito bite,from where the infective larvae goes into lymphatic system. Infective larvae develop into adult male & female worm in human host. Manifestation of clinical filariasis depend upon the stage in course of infection in human host & the adult worm.

MATERIAL AND METHODS -

A) Sample Collection:-

A door-to door- survey is conduct in the selected localities of Osmanabad Tahsil to include individuals (adults and children > 5 yrs) in the study, informed consent was obtain from Government Medical Officers. The Study of individuals, Study the host history, and diethyl carbamazine citrate (DEC) consumption.

B) Collection of Blood sample for Microfilaria (mf) detection :

Study subjects were examined under the supervision and guidance of Government Medical officer. For epidemiological screening 20 milimicron of finger prick blood can smear on a slide. Sample preparation, collection, fixation, storage, staining & mounting of mf. The smears were air dried, dehaemoglobinised & stained with writgh's stain to detect mf.

RESULTS :

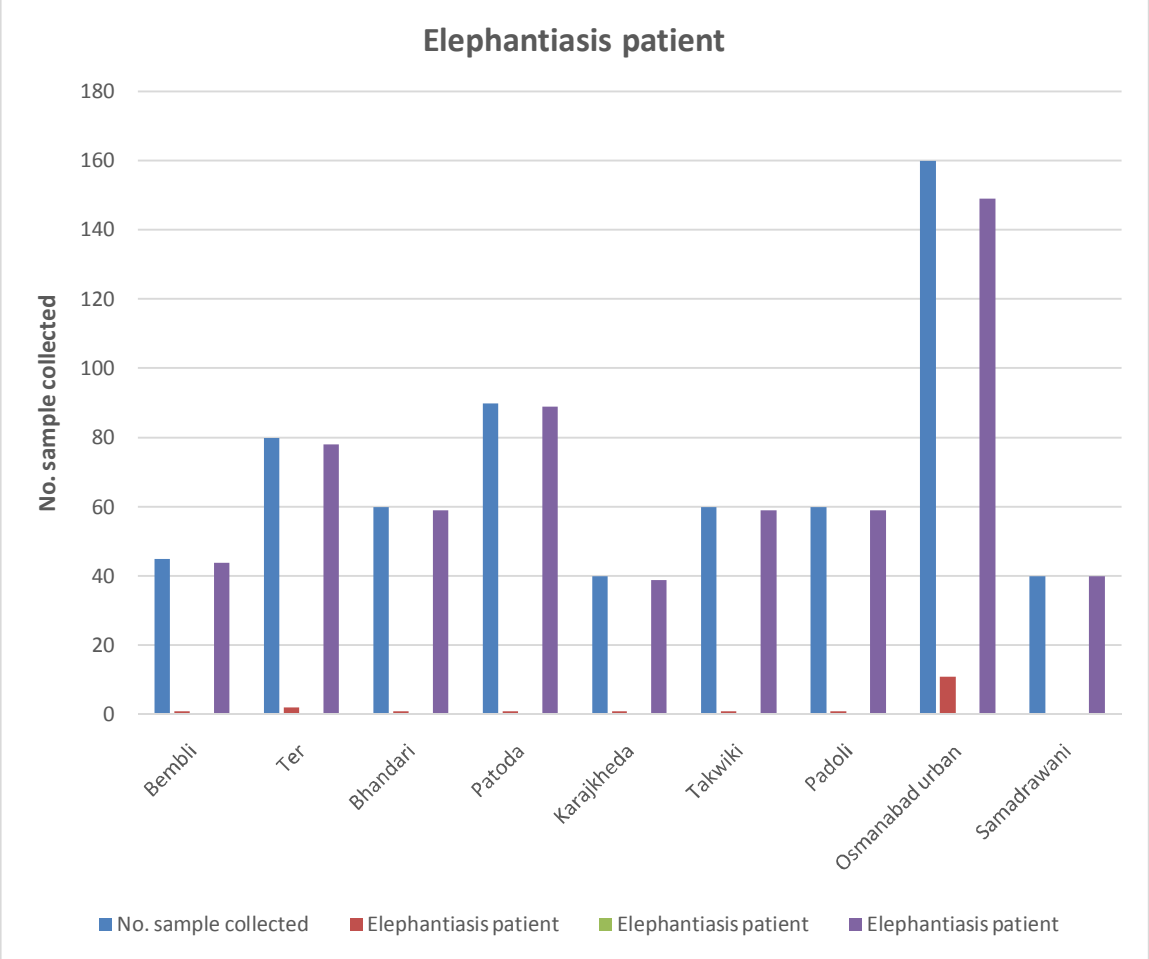
The survey method was used for the present research. The data obtained through the blood sample and questionnaire are further analyzed and interpreted in the following paragraphs. The objectives behind this analysis were to achieve the objectives of the present research. The original data are given in appendix. The current study aims to survey and examining the parasite distributions, identity the risk factors associated with Filariasis prevalence and effect of Filariasis at the district level to examine a samples. This study is undertaken in an attempt to shed light on the existence of Filariasis in a previously non-endemic area.
Table No.1 Shows Survey of the elephantiasis in Osmanabad Tahsil.

SURVEY OF THE ELEPHANTIASIS PATIENT IN OSMANABAD TAHSIL

Table No. 1

Name of Village	No. sample collected	Elephantiasis patient			
		Positive	%	Negative	%
Bembli	45	1	2%	44	98%
Ter	80	2	3%	78	98%
Bhandari	60	1	2%	59	98%
Patoda	90	1	1%	89	99%
Karajkheda	40	1	3%	39	98%
Takwiki	60	1	2%	59	98%
Padoli	60	1	2%	59	98%
Osmanabad urban	160	11	7%	149	93%
Samadrawani	40	0	0%	40	100%

Graph No. 1

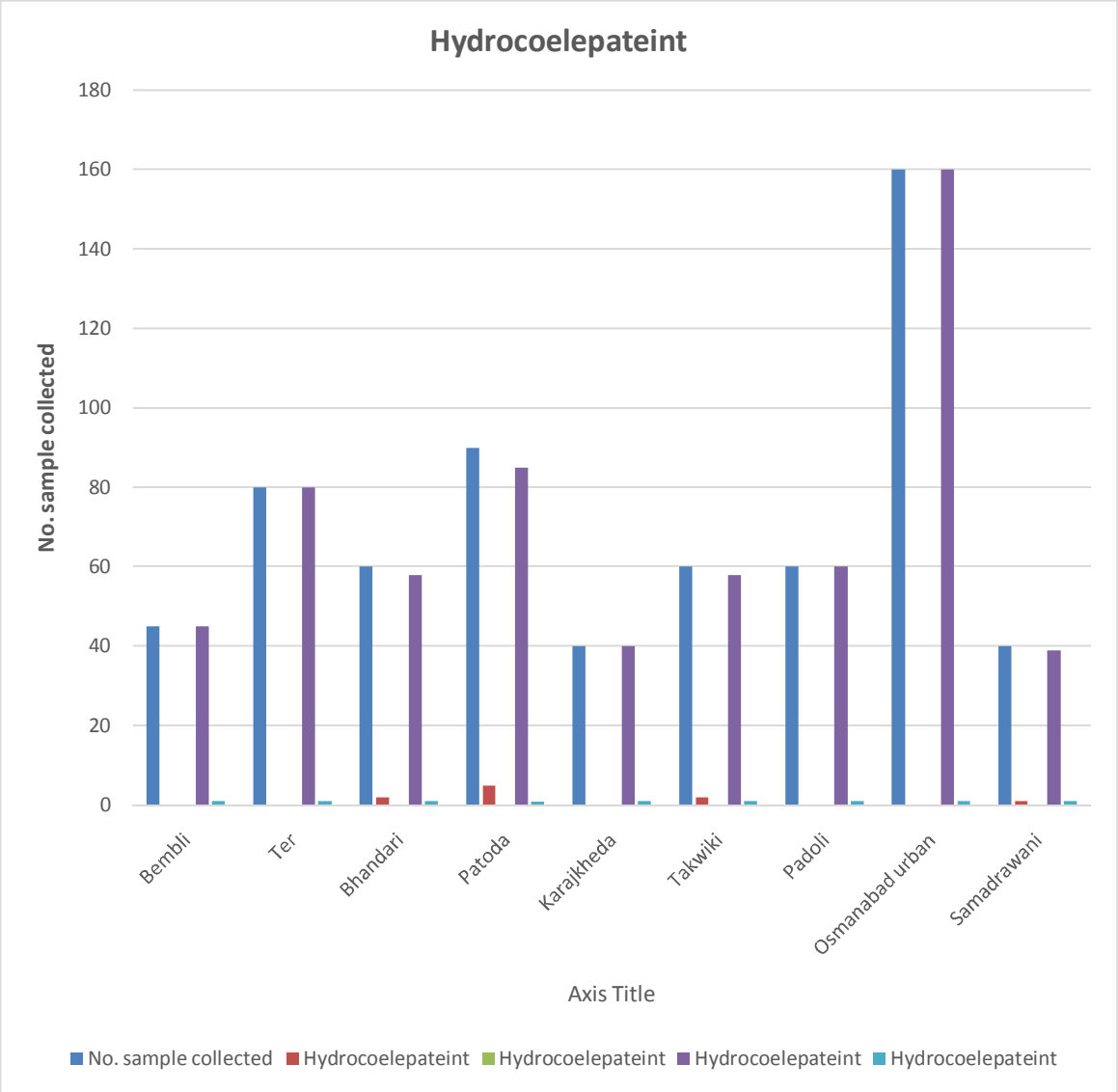


SURVEY OF THE HYDROCOELE PATIENT IN OSMANABAD TAHSIL

Table No 2

Name of	No. sample collected	Hydrocoelepateint			
		positive	%	negative	%
Bembli	45	0	0%	45	100%
Ter	80	0	0%	80	100%
Bhandari	60	2	3%	58	97%
Patoda	90	5	6%	85	94%
Karajkheda	40	0	0%	40	100%
Takwiki	60	2	3%	58	97%
Padoli	60	0	0%	60	100%
Osmanabad urban	160	0	0%	160	100%
Samudrawani	40	1	3%	39	98%

Graph No 2



DISCUSSION :

We compare the urban & rural areas profiles of infection. The worm intensities were higher. W. bancrofti transmission is largely determined by the geo-environmental variables, and hence it is possible to identify the areas where the risk of transmission can be determined on a microscale. On GIS platform the geo-environmental risk model developed, and could be employed for special delimitation of filariasis riskon a macro scale. Particularly to identify "non-risk" areas. Human factors are also key determinants contributing to the local occurrence of the filariasis. Environmental factors are widely conductive, for transmission. Population density, movement, occupation, health seeking behaviour, economic status, literacy level these are the influence of human factors at microlevel. Simply, the vector abundance may widely at microlevel depending on the human associated factors & geophysical factors, but 'vectorial capacity' (vector survival & capacity for parasite development) and the transmission of infection are greatly determined by the geo-environmental factors at macro level. GalvezTan Jaimez(2003)

Results have been reported from rural areas, were domestic activities affected female were seen to be impaired due to chronic & acute manifestation of the disease. Physical difficulties arose in spite of the majority of patients interviewed suffering from filariasis and hydrocoel.

CONCLUSION :

In above tabls no 1 we observe that elephantiasis patients found more in urban areas of osmanabad tahsil.

In above table no 2 we observe that hydrocoel patients are found more in rural areas as compare to urban areas.

In urban risk area control unit should be made. Advocacy, education, information should be a part of eliminating filariasis. A significant proportion of patients with chronic filariasis and hydrocoel in osmanabad tahsil suffer some of physical disabilities, psychological and social consequences due to tha illness, despite having treated conventionally with long term DEC.

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REFERENCES :

1. Ramaiah KD. Guyatt: H. Ramu K. Vanamail P. Pani SP, Das PK: Treatment cosnts and loss of work time to individuals with chronic lymphatic filariasis in rural communities in south India.
2. Suma TK, Shenoy RK, Kumaraswami V: A qualitative study of the perceptions, practices and socio-psycholkogical suffering related to chronic brugian filariasis Kerala, southern India.
3. Krishna Kumari A, Harichandrakuamr KT, Das LK, Krishnamorrthy K: Physical and psychosocial burden due to lymphatic filariasis as perceived by patients and medical experts. Trapical Medicine andInternational Health 2005, 10:567:573.
4. Ramaiah KD, Ramu K, Guyatt H, ijay Kumar KN, Pani SP: Direct and inddirect costs of acute form of lymphatic filariasis in rural areas in Tamil Nadu, south India. *Tropical Medicine and international Health 2003. 8:1 102-1 109.*
5. Babu BV. Nayak AN: **Treatment costs and work time los due to episodic adenolymphangitis in lymphatic filariasis patients in rural communities of Orissa, India. *Trapical Medicine and International Health*** 2003, 8:1 102.1109.